PDB82
ADHERENCE AND PERSISTENCE IN PATIENTS INITIATING TREATMENT WITH INJECTABLE THERAPIES FOR TYPE 2 DIABETES MELLITUS (T2DM) IN SPAIN
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OBJECTIVES: Studies indicate that poor adherence and low persistence to treatment could lead in not achieving recommended glycemic goals in T2DM patients. The aim of this study was to assess the adherence and persistence of patients who initiate treatment with insulin or with glucagon-like peptides analogs (GLP-1) in Spain. **METHODS:** Observational, retrospective study based (funded by GSK) on review of medical records from patients located in Badalona sanitary area (1 hospital and 6 primary care centers). Inclusion criteria: patients ≥ 20 years old who initiated treatment with insulin or GLP-1 during 2010-2012, T2DM diagnosis at least one year before initiation of injectable treatment. Patients were followed for one year. Adherence and persistence during the follow up period were analyzed. Medication Possession Ratio (MPR) was used as a proxy of adherence. MPR is calculated as the percentage of days covered by the medication prescribed during the study period. Persistence rate is defined as percentage of patients having prescriptions of the ongoing therapy continuously renewed without a gap of more than 30 days. **RESULTS:** 1,301 patients were recruited, mean age was 67.6 years, 51.6% men, 935 initiated with insulin and 366 with GLP-1. In comparison with insulin, patients treated with GLP-1 showed higher adherence to treatment (88.1% vs 82.7%; p<0.001). Higher persistence is also achieved with GLP-1 vs insulin (62.0% vs 55.9%; p=0.046). After 3 months treatment persistence rate start to diverge and differences are maintained during the study period (6 months, persistence rate 86.1% for GLP-1 vs 79.4% for insulin; 10 months 77.1% vs 70.8%, respectively) **CONCLUSIONS:** Adherence and persistence to treatment seems to be higher with GLP-1 than insulin in T2DM patients in Spain. Further studies are needed to identify reasons for those differences between treatments. The overall management of T2DM should address adherence and persistence as key drivers for achieving therapeutic goals.

PDB83
MEDICATION ADHERANCE AND SATISFACTION WITH TREATMENT IN PATIENTS WITH DIABETES MELLITUS RECEIVING ORAL COMBINATION THERAPY: DATA OF A REAL-WORLD STUDY
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OBJECTIVES: Medication adherence and satisfaction with treatment are key dimensions of healthcare quality. Large proportion of patients with type 2 diabetes mellitus (T2DM) receive oral combination therapy. We aimed to assess medication adherence and treatment satisfaction in T2DM patients receiving oral combination therapy in a real-world setting. **METHODS:** 160 T2DM patients receiving combination therapy for at least 6 months (mean 6.5 yrs, 0.6–17 yrs) were enrolled in the multicenter real-world study: cohort 1 – vildagliptin plus metformin (mean age 59.6 yrs; male/female 25/57); cohort 2 – sulfonylurea (SU) plus metformin (mean age 65.1 yrs; male/female 23/55). All the patients completed the Morisky Medication Adherence Scale (MMAS 4) and the checklist for assessment of treatment satisfaction. Statistical analysis was made using t-test and $\chi 2$ criterion. **RESULTS:** As a whole, 90% patients had good adherence with treatment; 50% in cohort 1 vs 36% in cohort 2 were completely adhered with medication. Treatment satisfaction was high-rated by the patients; there were no patients who were extremely dissatisfied with treatment. All aspects of treatment satisfaction – overall treatment satisfaction (0.82 vs 0.54), treatment efficacy (0.98 vs 0.58), treatment convenience (0.8 vs 0.54) and coping with hypoglycemia (1.06 vs 0.63) were significantly lower in cohort 2 as compared to cohort 1 (p<0.02). In addition, 59% patients in cohort 2 experienced hypoglycemia vs 28% from those in cohort 1. The proportion of patients with better coping with hypoglycemia was higher in cohort 1 than in cohort 2 (53.7% vs 31.2; p<0.006). **CONCLUSIONS:** In general, good levels of medication adherence and treatment satisfaction in T2DM patients receiving oral combination therapy were demonstrated in a real-world setting. Combination of vildagliptin plus metformin was more preferable from patients' perspective in terms of medication adherence and treatment satisfaction as compared to SU plus metformin.

PDB84
ADHERENCE TO INITIATED BASAL INSULIN ANALOG TREATMENT IN TYPE 1 AND 2 DIABETES
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OBJECTIVES: Poor medication adherence is common in diabetes potentially causing poor health outcomes and complications. The aim of this study was to analyze the discontinuation rate of initiated basal insulin analog in type 1 and type 2 diabetic patients in Finland. **METHODS:** The data was obtained from the national reimbursement registry. Study population consisted of 14 462 diabetic patients (18% had type 1 diabetes) who started basal insulin analogs (insulin glargine or insulin detemir) in 2012. Patients were followed by their insulin purchases for 18 months after the initiation. The data was analysed with $\chi 2$-test and logistic regression analysis. Logistic regression analysis was used to find out what variables (age, gender, type of diabetes, type of insulin analog) explain patient staying in the treatment. **RESULTS:** Type of insulin, gender, age and type of diabetes had statistically significant influence on patients' treatment adherence (p < 0.001 for all). Overall 47 % of patients starting insulin detemir and 39 % starting insulin glargine patients discontinued their basal insulin treatment within 18 months of the initiation. Most of the patients stopped treatment within first 6 months after the initiation. In type 1 diabetic patients, 42 % of insulin glargine patients and 57 % of insulin detemir patients stopped the initiated treatment. In type 2 diabetic patients, 35 % stopped insulin glargine and 38 % insulin detemir. In only 15% of the patients discontinuing the initiated basal insulin, death or switch to other insulin or GLP-1RA explained the discontinuation suggesting non-adherence to insulin therapy from other reasons. **CONCLUSIONS:** There is a considerable proportion of diabetic patients discontinuing their initiated basal insulin analog. Future studies are warranted to examine the detailed reasons for discontinuation.

PDB85
POTENTIAL BARRIERS TO INSULIN INTENSIFICATION AMONG PATIENTS WITH TYPE 2 DIABETES: THE PATIENT PERSPECTIVE IN GERMANY
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OBJECTIVES: Patient perceived barriers to intensifying treatment may lead to sub-optimal glycaemic control. This study assessed patient experience with insulin in Germany, preferences on insulin injection, and behaviours associated with intensification in insulin-treated type 2 diabetes mellitus (T2DM) patients. **METHODS:** Adults with T2DM diagnosed >6 months ago and receiving insulin for ≥3 months were recruited through a representative online panel in Germany. Data were collected via an online questionnaire. **RESULTS:** Of the 302 respondents, mean age was 56 years, with average 12 years since diagnosis and 7 years on insulin. Only 82% (247/302) knew their HbA1c with 37% (111/302) reporting HbA1c>8.0%. Overall, 87% (263/302) had BMI≥25kg/m2, with 56% (169/302) BMI≥30. Basal-only insulin was used by 32% (96/302), short-acting (bolus) insulin only 13% (38/302), basal-bolus 47% (142/302), premix 7% (22/302). A total of 72% (216/302) reported ever having a non-severe (self-managed) hypoglycaemic event with 19% (42/216) of these reporting events occurring once-a-week or more. Also, 19% (57/302) reported at some point having a severe (requiring help to manage) hypoglycaemic event. 67% (201/302) respondents tested blood glucose 3-6 times daily. 12% (11/96) of the basal-only respondents had previously received basal-bolus but returned to long-acting insulin due to various issues. A total of 51% (49/96) currently on basal-only would hesitate to some degree if asked by their physician about intensifying treatment (switch to basal-bolus or premix). Most frequent reason was number of daily injections (39%, 19/49), followed by dose calculation and timing (37%, both 18/49), risk of hypoglycaemia (35%, 17/49) and weight gain (33%, 16/49). **CONCLUSIONS:** Number and timing of injections, dose calculation, risk of hypoglycaemia and weight gain may present barriers to insulin intensification among T2DM patients on basal insulin in Germany, and contribute to suboptimal HbA1c control. Therapies addressing these challenges may help to achieve treatment goals.

PDB86
BARRIERS TO INTENSIFICATION OF INSULIN TREATMENT IN PATIENTS WITH TYPE 2 DIABETES IN THE NETHERLANDS: ASSESSING PATIENT PREFERENCES AND BEHAVIOURS
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OBJECTIVES: Factors other than efficacy and safety may influence choice of treatment for the patient. Barriers to intensification may lead to poor glycaemic control. This study aimed to assess patient barriers and behaviours relating to intensification of treatment in insulin-treated Type-2-diabetes (T2DM) in the Netherlands. **METHODS:** Patients diagnosed >6 months ago and receiving insulin for ≥3 months were recruited through a representative online panel in the Netherlands. Data were collected using a web-based questionnaire. **RESULTS:** The 315 respondents had mean age of 59 years, BMI 31kg/m2 and 8-years insulin treatment. Of the 179 who knew their HbA1c, 45 (25.1%) were uncontrolled (>8%) with mean HbA1c 9.7%. Overall, basal-only insulin was used by 31.1% (98/315), with 6.7% (21/315) on short-acting only (bolus), 47.9% (151/315) basal-bolus, 11.8% (37/315) premix and 2.5% (8/315) other. Of the respondents whose main contact was primary care, only 17.2% (10/58) of basal-only patients reported ever attending secondary care for treatment, compared with 32.3% (20/62) on basal-bolus. Compared to those on basal-only, more respondents on basal-bolus stated they sometimes forget to take insulin (17.3% (17/98) vs 31.1% (47/151), respectively) or were likely to forget to pack insulin when travelling or leaving home (6.1% (6/98) vs 17.9% (27/151)). If asked by their physician, 41% of basal-only patients would hesitate to intensify treatment through adding bolus/switching to premix. Most frequent reason was increased number of daily injections (45.0%, 18/40), as well as difficulty calculating mealtime dose and risk of weight gain (both 40.0%; 16/40), timing of dosing with meals (37.5%; 15/40) and hypoglycaemia risk (30.0%; 12/40). **CONCLUSIONS:** Patients on intensified regimens may require increase used of secondary care, whilst number/timing of injections, dose calculation, hypoglycaemia risk and weight gain are barriers to insulin intensification among T2DM patients on basal insulin. Therapies addressing these may help to achieve treatment goals.

PDB87
PATIENT PERSPECTIVE ON CONVENIENCE AND INTENSIFICATION OF INSULIN TREATMENT IN TYPE 2 DIABETES IN ITALY
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OBJECTIVES: The progressive nature of Type-2 diabetes mellitus (T2DM) requires periodic intensification of therapy. Understanding the potential barriers to this from patients will support appropriate treatment selection. This study aimed to assess hypoglycaemic events, treatment convenience and potential barriers to treatment intensification in Italy. **METHODS:** A web-based survey of subjects with type 2 diabetes, diagnosed >6 months previously and receiving insulin for ≥3 months, recruited via a representative online panel. **RESULTS:** 302 patients were recruited. Mean body mass index (BMI) was 27 kg/m2, with 24% (72/302) BMI>30kg/m2. Of the 218 reporting exact HbA1c, 75 (34%) had HbA1c>8.0%. Of the 72 with BMI>30kg/m2